

**WHAT IS CLAIMED IS:**

1. A notebook computer comprising:
  - a central processing unit (CPU);
  - a display device coupled to the CPU to display an image;
  - an evaporator coupled to the CPU to extract heat generated by the CPU;
  - a heat exchanger coupled to the evaporator;
  - a transport medium to flow inside the evaporator and the heat exchanger to transfer the generated heat from the CPU to the heat exchanger; and
  - a pump attached to the evaporator and the heat exchanger to force the transport medium between the evaporator and the heat exchanger.
2. The notebook of claim 1 further including a main memory coupled to the CPU.
3. The notebook of claim 1 further including a memory coupled to the display device to store the image.
4. The notebook of claim 1 wherein the evaporator is coupled to the CPU through a thermal interface material.
5. The notebook of claim 1 wherein the transport medium is a liquid selected from a group comprising water, alcohol, glycol, an inert liquid, surfactants, and mixtures thereof.
6. The notebook of claim 1 wherein the transport medium is capable of changing phase inside the evaporator.
7. The notebook of claim 1 wherein the evaporator has multiple parallel channels.
8. The notebook of claim 7 wherein the multiple channels are one or more of mini-channels and micro-channels.

9. The notebook of claim 1 wherein the evaporator is constructed with material selected from a group comprising copper, silicon, and combinations thereof.
10. The notebook of claim 1 wherein the heat exchanger is located remote from the CPU.
11. The notebook of claim 1 further including a fan proximate to the heat exchanger to enhance airflow across the heat exchanger.
12. The notebook of claim 1 further including an accumulator coupled between the pump and the evaporator to perform one or more acts selected from a group comprising regulating a system pressure, regulating an operating flow regime, regulating boiling, and accommodating changing volume in the transport medium with change in phase.
13. A cooling apparatus comprising:
- an evaporator coupled to a heat generating device to extract the generated heat away from the device, the device being installed inside a notebook computer;
  - a heat exchanger coupled to the evaporator;
  - a transport medium to flow inside the evaporator and the heat exchanger to transfer the generated heat from the device to the heat exchanger; and
  - a pump attached to the evaporator and the heat exchanger to force the transport medium between the evaporator and the heat exchanger.
14. The apparatus of claim 13 wherein the heat-generating device is selected from a group comprising a CPU, a memory circuit, a power supply circuit, and a circuit board.
15. The apparatus of claim 13 wherein the evaporator is coupled to the device through a thermal interface material.

16. The apparatus of claim 13 wherein the transport medium is a liquid selected from a group comprising water, alcohol, glycol, an inert liquid, surfactants, and mixtures thereof.
17. The apparatus of claim 13 wherein the transport medium changes phase inside the evaporator.
18. The apparatus of claim 13 wherein the evaporator has multiple parallel channels.
19. The apparatus of claim 13 wherein the evaporator has surface treatment to enhance boiling characteristics.
20. The apparatus of claim 13 wherein the evaporator is constructed with material selected from a group comprising copper, silicon, and combinations thereof.
21. The apparatus of claim 13 wherein the heat exchanger is located remote from the device.
22. The apparatus of claim 13 further including a fan proximate to the heat exchanger to enhance airflow across the heat exchanger.
23. The apparatus of claim 13 wherein the heat exchanger has surface enhancement internally to enhance condensation.
24. The apparatus of claim 13 further including an accumulator coupled between the pump and the evaporator to perform one or more acts selected from a group comprising regulating a system pressure, regulating an operating flow regime, regulating boiling, and accommodating changing volume in the transport medium with change in phase.
25. A cooling method comprising:

providing an evaporator inside a notebook computer coupled to a heat

generating device;

providing a heat exchanger coupled to the evaporator;

providing a pump to pump a transport medium through the evaporator and the heat exchanger to transfer the generated heat from the device to the heat exchanger.

26. The method of claim 25 wherein the heat-generating device is selected from a group comprising a CPU, a memory circuit, a power supply circuit, and a circuit board.

27. The method of claim 25 wherein the transport medium is a liquid selected from a group comprising water, alcohol, glycol, an inert liquid, surfactants, and mixtures thereof.

28. The method of claim 25 wherein the evaporator has multiple parallel channels.

29. The method of claim 25 further including providing a fan proximate to the heat exchanger to enhance airflow across the heat exchanger.

30. The method of claim 25 further including providing an accumulator coupled between the pump and the evaporator to perform one or more acts selected from a group comprising regulating a system pressure, regulating an operating flow regime, regulating boiling, and accommodating changing volume in the transport medium with change in phase.